

Appl. No. 10/806,520
Amdt. dated Feb. 23, 2006
Reply to Office action of Nov. 23, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A semiconductor device comprising:
a substrate having conductive interconnections;
two or more vertically stacked chips on said substrate, each supporting chip having a protective overcoat layer over a first surface and bond pads covered with bond pad caps;
metal standoffs having the same thickness as the bond pad caps disposed on the first surface, contacting the protective overcoat layer [[thereon]] to separate [[it]] the supporting chip from the next successive chip; and
a plurality of bond wires connecting at least one chip to said substrate.
2. (original) A semiconductor device as in claim 1, wherein said metal standoffs comprise aluminum islands.
3. (original) A semiconductor device as in claim 1, wherein the thickness of said metal standoffs is 5 to 20 kA.
4. (original) The semiconductor device of claim 1 wherein said standoffs are patterned over the chip passivation layer.
5. (original) The semiconductor device of claim 1 wherein said metal standoffs are thermally conductive.
6. (original) The semiconductor device of claim 1 wherein said metal standoffs are positioned within the area surrounded by bond pads.
7. (original) The semiconductor device of claim 1 wherein a polymeric adhesive secures the first chip to said substrate.
8. (original) The semiconductor device of claim 1 wherein bond wires connect more than one chip to said substrate.

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9. (original) The semiconductor device of claim 1 wherein said substrate is a BGA package substrate.
10. (canceled)
11. (original) The device of claim 1 wherein said supporting chips include copper bond pads having aluminum caps.
- 12-18. (canceled)
19. (new) The device of claim 1, further comprising a adhesive layer for securing the metal standoffs to the next successive chip.
20. (new) The device of claim1 in which the metal standoffs and the bond pad caps have the same etched profile.

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